

FIG. 1

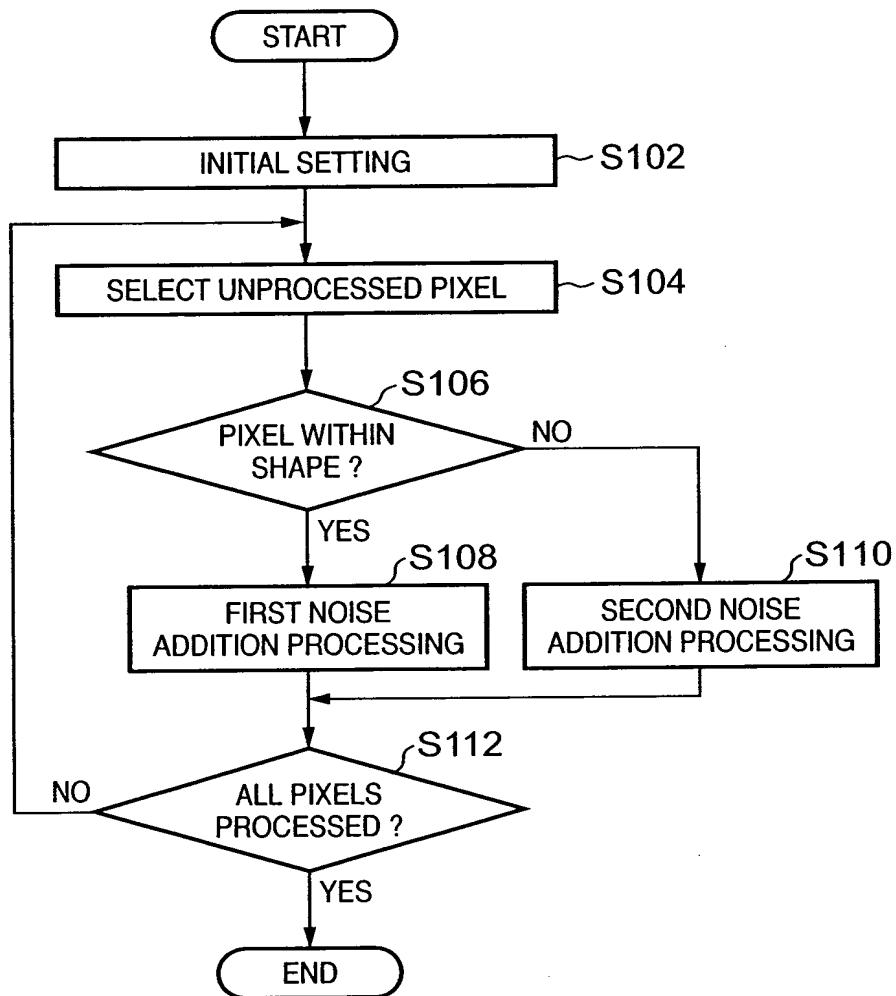


FIG. 2

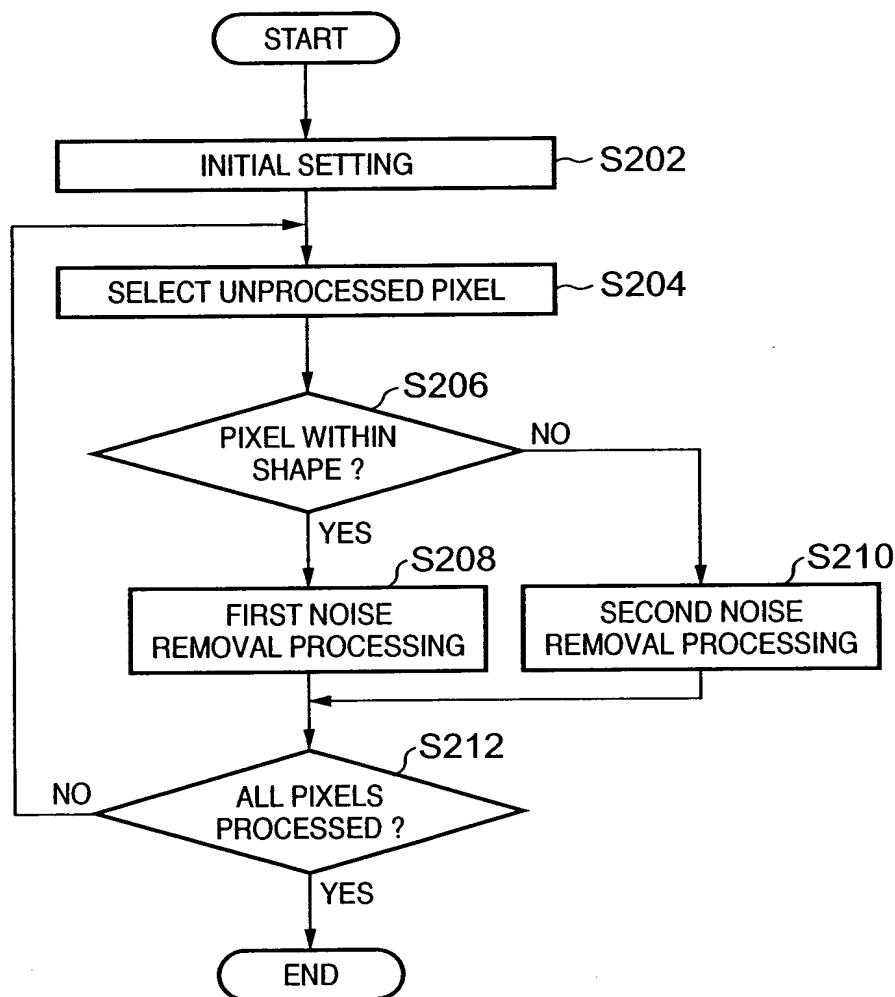


FIG. 3

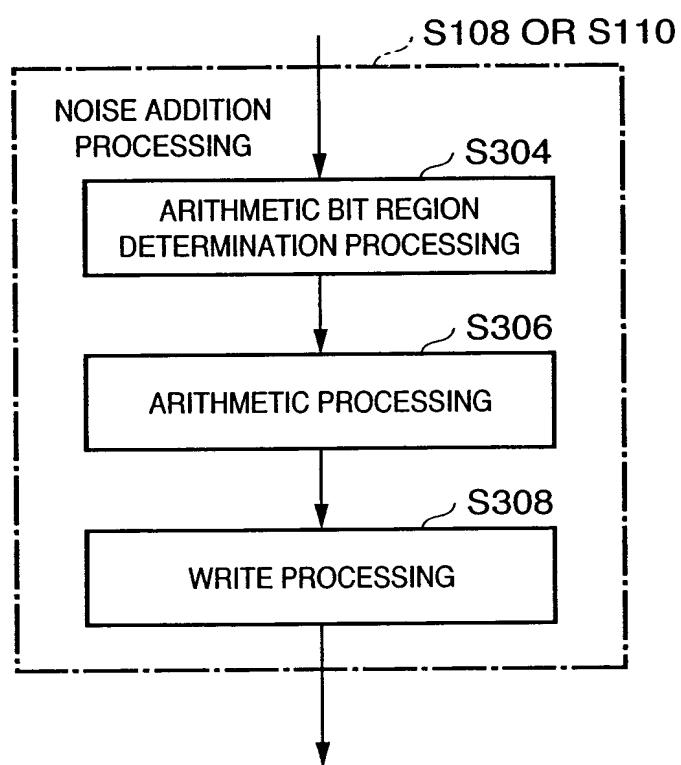


FIG. 4

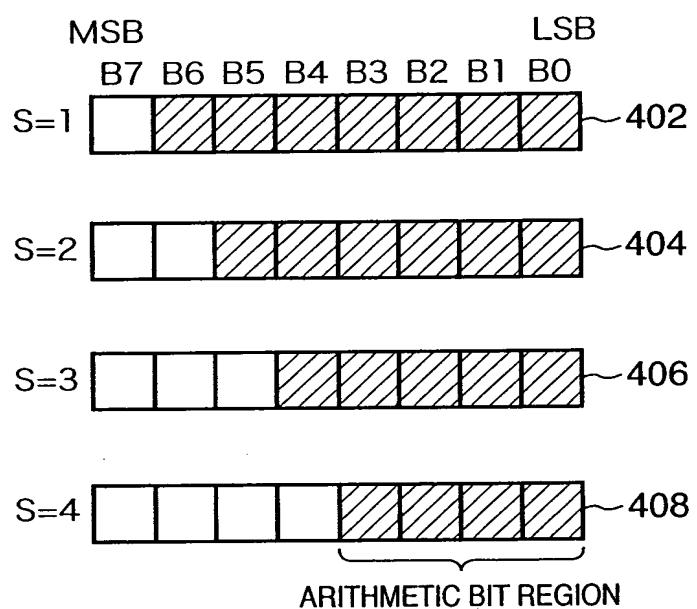


FIG. 5

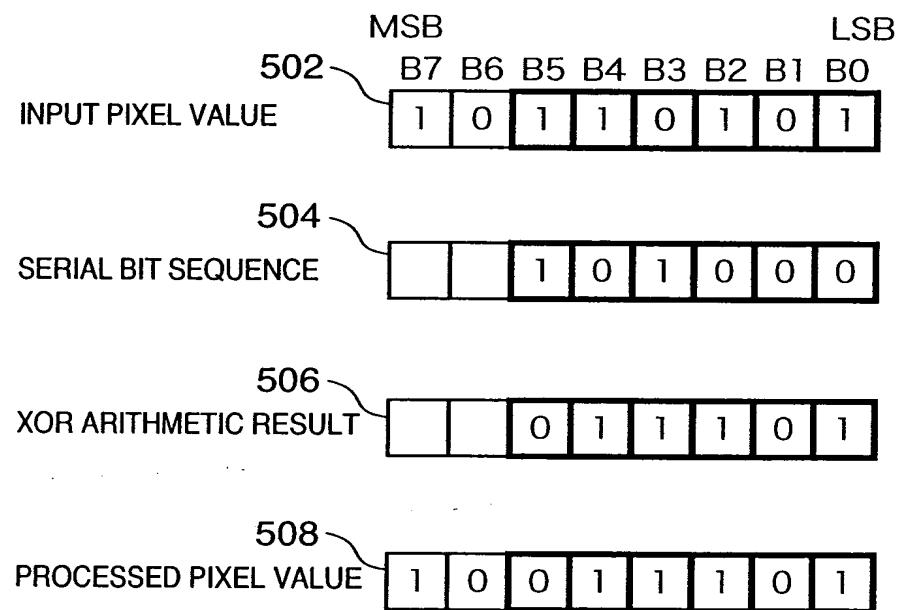


FIG. 6

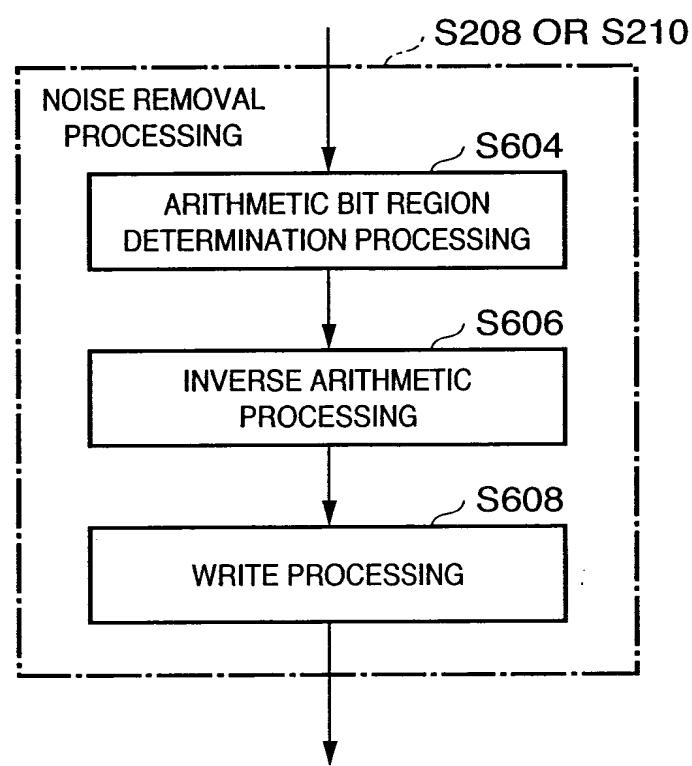


FIG. 7

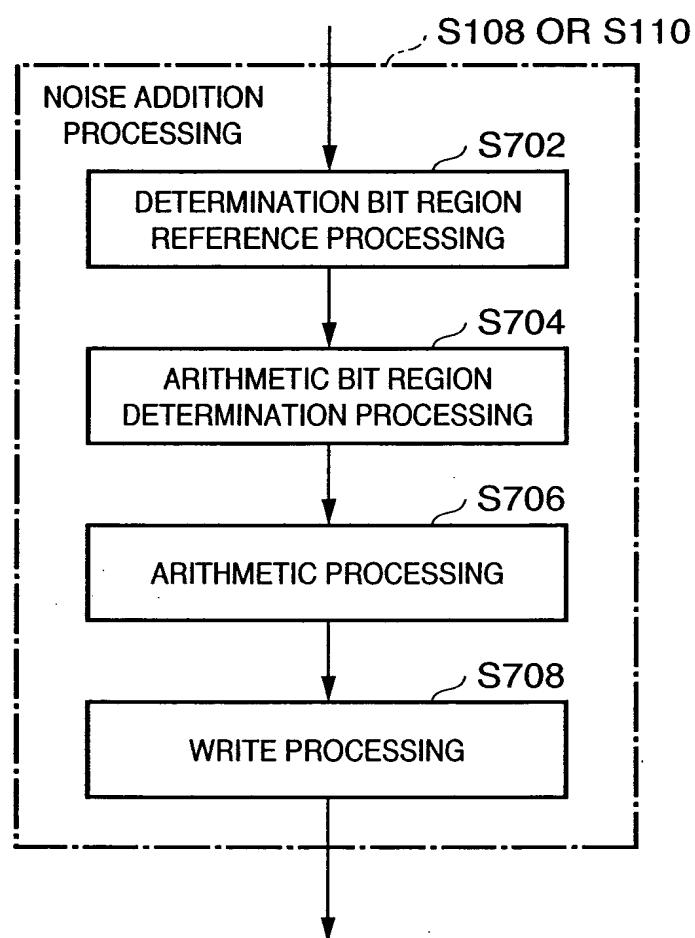
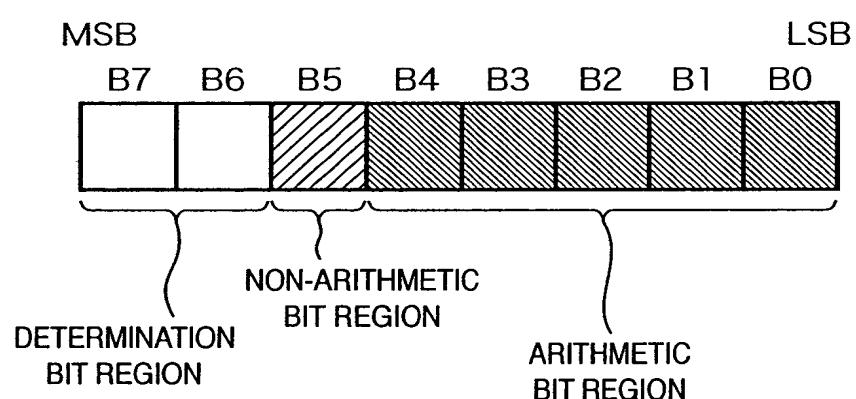


FIG. 8



F I G. 9A

901

DETERMINATION BIT REGION ARITHMETIC BIT REGION

FOR S = 1

DETERMINATION BIT REGION		ARITHMETIC BIT REGION					
B7	B6	B5	B4	B3	B2	B1	B0
1	1	Y	Y	Y	Y	Y	Y
1	0		Y	Y	Y	Y	Y
0	1			Y	Y	Y	Y
0	0				Y	Y	Y

902

Δ_{\max}
63
31
15
7

F I G. 9B

DETERMINATION BIT REGION ARITHMETIC BIT REGION

FOR S = 2

DETERMINATION BIT REGION		ARITHMETIC BIT REGION					
B7	B6	B5	B4	B3	B2	B1	B0
1	1			Y	Y	Y	Y
1	0				Y	Y	Y
0	1				Y	Y	Y
0	0						Y

Δ_{\max}
15
7
3
1

FIG. 10

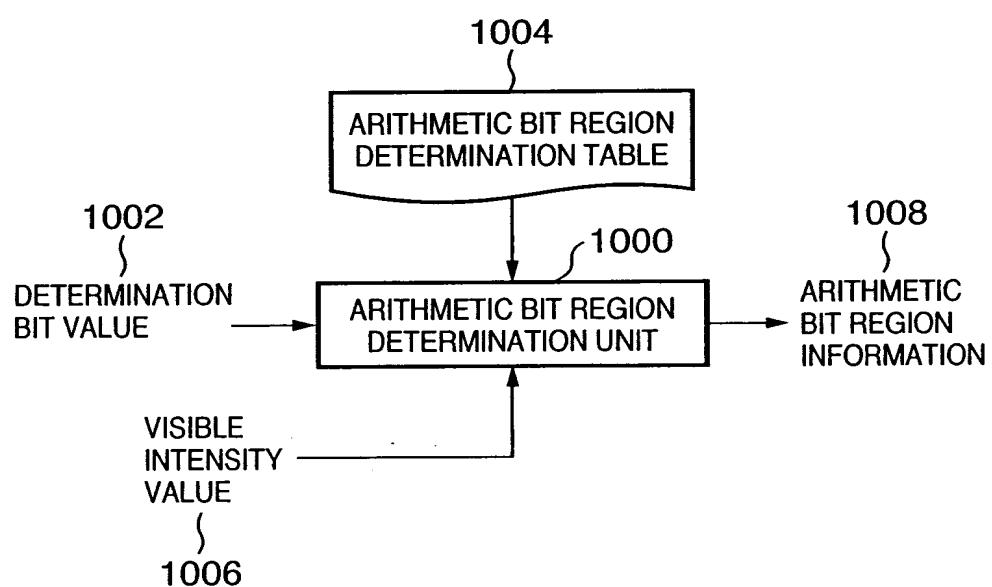


FIG. 11

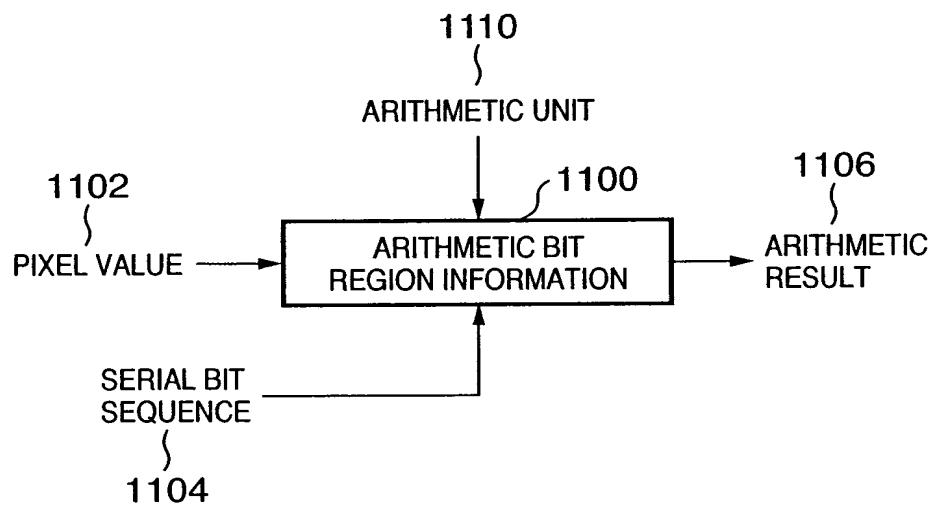


FIG. 12

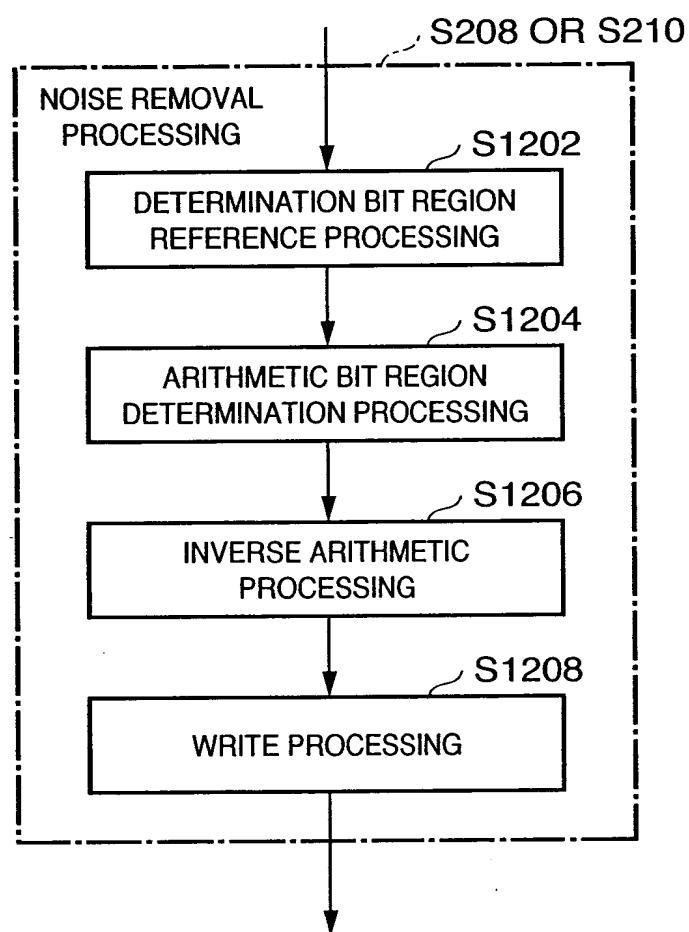


FIG. 13

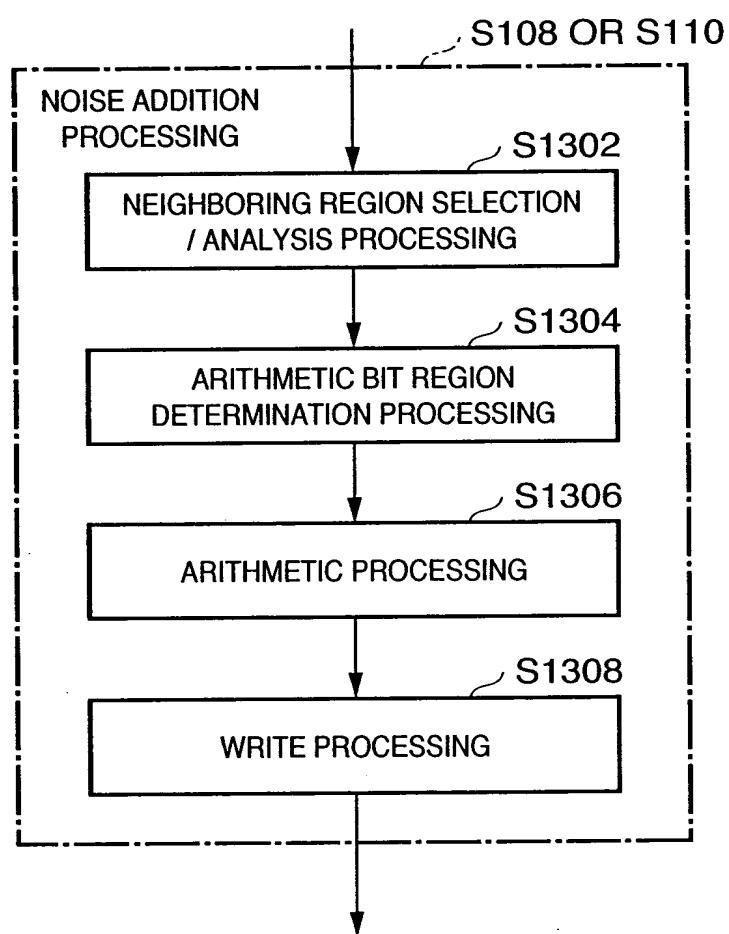
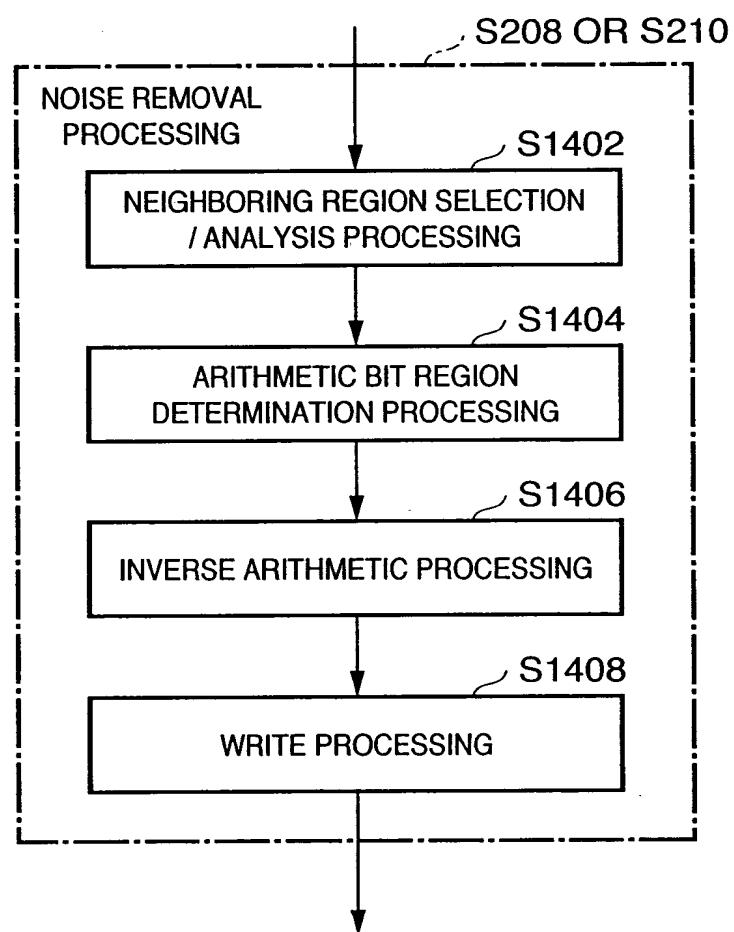


FIG. 14



F I G. 15

1501

<u>1a</u> 100	<u>2a</u> 104	<u>3a</u> 130	<u>4a</u>	<u>5a</u>
<u>6a</u> 115	<u>7a</u> 112	<u>8a</u> 120	<u>9a</u>	<u>10a</u>
<u>11a</u> 118	<u>12a</u> 112	<u>13a</u> 116	<u>14a</u> 114	<u>15a</u>
<u>16a</u>	<u>17a</u>	<u>18a</u>	<u>19a</u>	<u>20a</u>
<u>21a</u>	<u>22a</u>	<u>23a</u>	<u>24a</u>	<u>25a</u>



1502

<u>1a</u> 100	<u>2a</u> 104	<u>3a</u> 130	<u>4a</u>	<u>5a</u>
<u>6a</u> 115	<u>7a</u> 112	<u>8a</u> 120	<u>9a</u>	<u>10a</u>
<u>11a</u> 118	<u>12a</u> 112	<u>13a</u> 126	<u>14a</u> 98	<u>15a</u>
<u>16a</u>	<u>17a</u>	<u>18a</u>	<u>19a</u>	<u>20a</u>
<u>21a</u>	<u>22a</u>	<u>23a</u>	<u>24a</u>	<u>25a</u>

FIG. 16

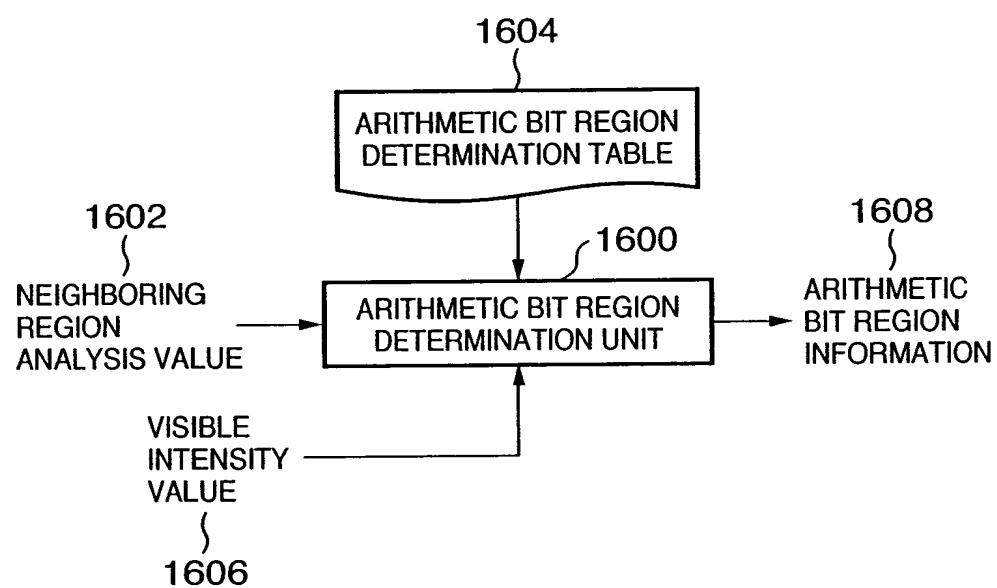


FIG. 17A

1702

NEIGHBORING REGION ARITHMETIC BIT REGION

1701

VISIBLE INTENSITY $S=1$

PIXEL VALUE	B7	B6	B5	B4	B3	B2	B1	B0	Δ_{max}
255			Y	Y			Y		50
254			Y	Y			Y		50
...									...
112				Y	Y		Y		26
...									...
1							Y		2
0							Y		2

FIG. 17B

NEIGHBORING REGION ARITHMETIC BIT REGION

VISIBLE INTENSITY $S=2$

PIXEL VALUE	B7	B6	B5	B4	B3	B2	B1	B0	Δ_{max}
255				Y	Y		Y		26
254				Y	Y		Y		26
...			
112					Y	Y			12
...						
1							Y		2
0							Y		2

FIG. 18

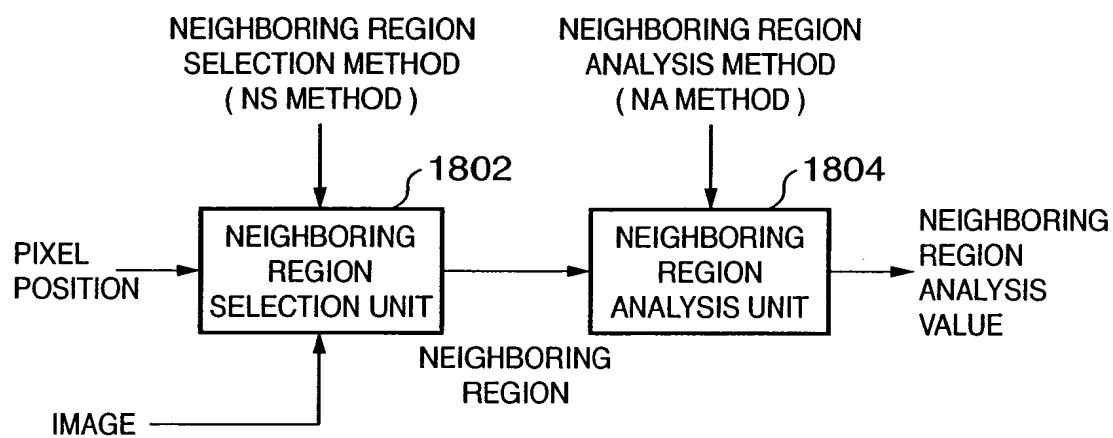


FIG. 19

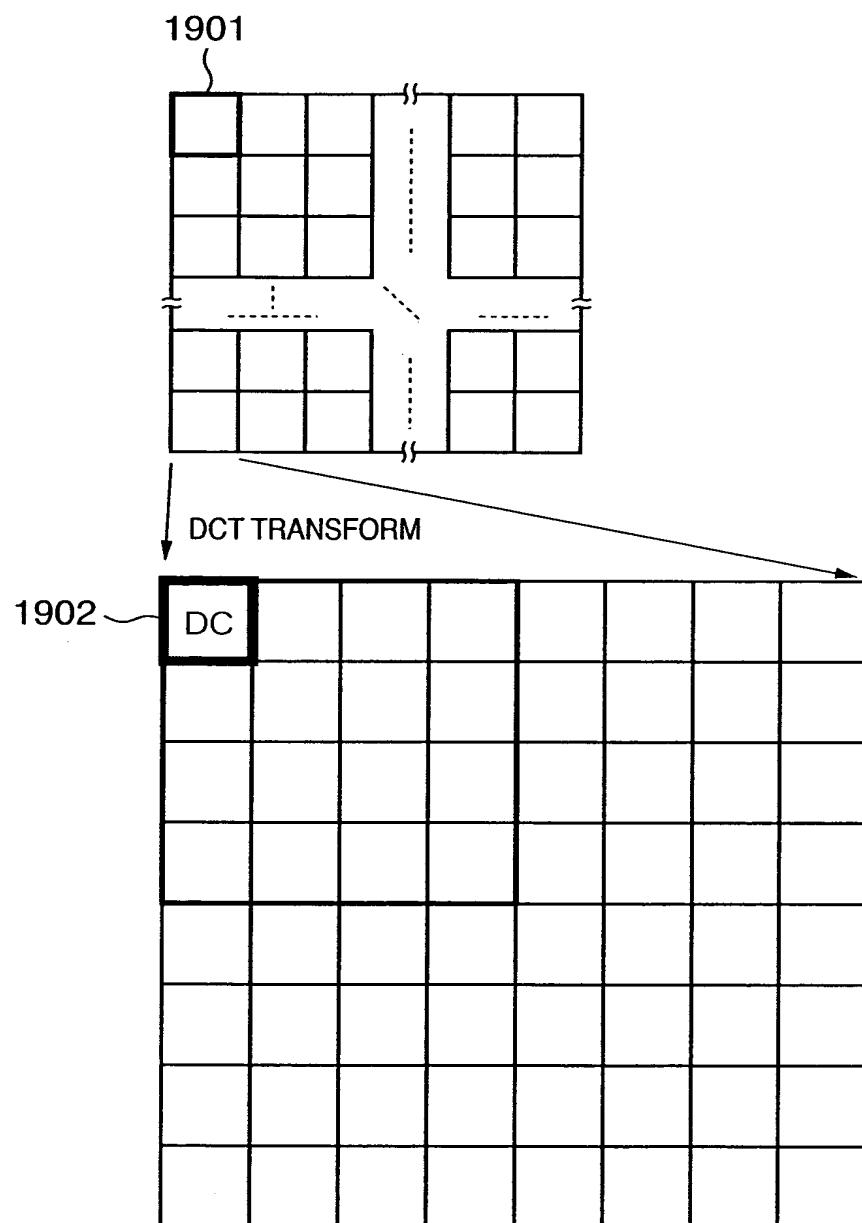


FIG. 20

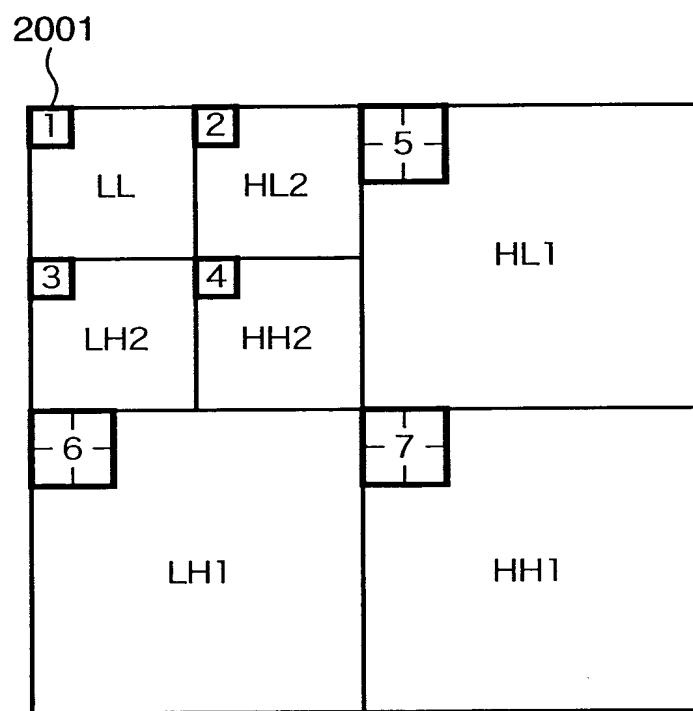


FIG. 21

2101

}

VISIBLE INTENSITY VALUE	DWT COEFFICIENT OF NOISE ADDITION TARGET
1	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> -5- <input type="checkbox"/> -6- <input type="checkbox"/> -7-
2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
3	<input type="checkbox"/> 1

FIG. 22



FIG. 23



FIG. 24

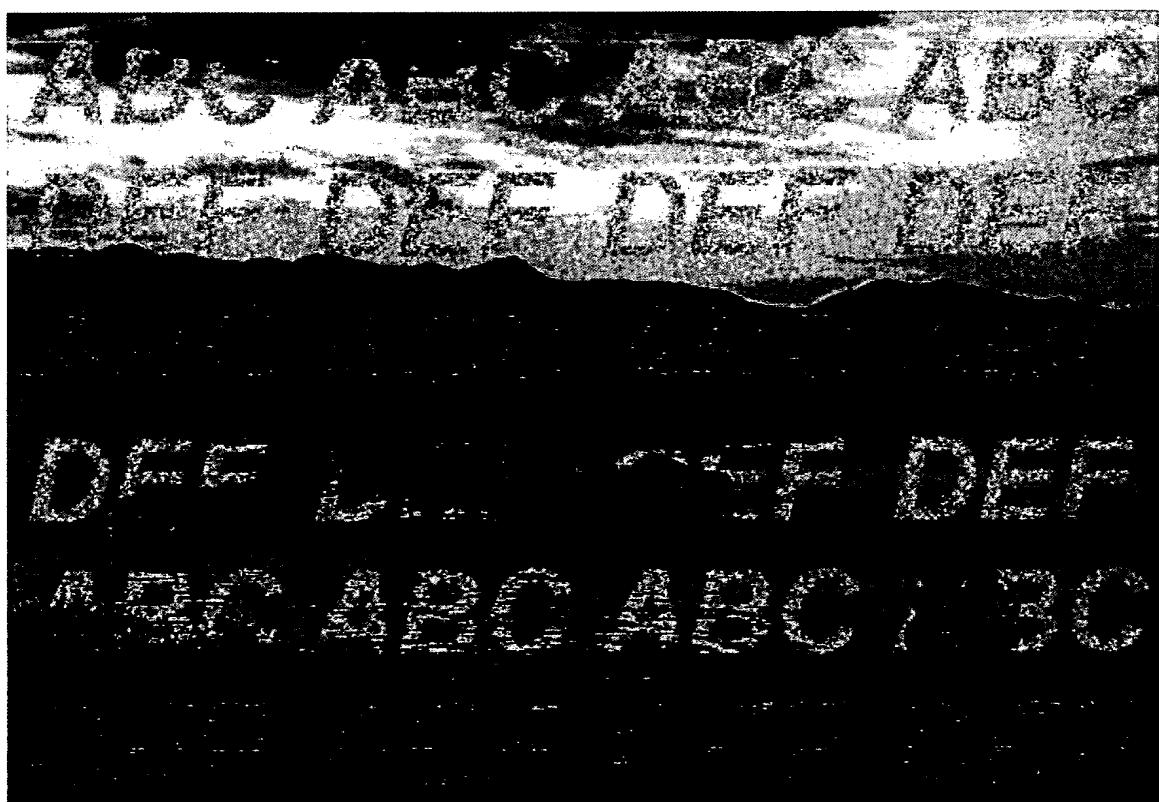


FIG. 25

